



(51) International Patent Classification:

C09G 1/02 (2006.01) *C09G 1/18* (2006.01)
C09G 1/04 (2006.01) *C09K 3/14* (2006.01)

(21) International Application Number:

PCT/IB2011/053867

(22) International Filing Date:

5 September 2011 (05.09.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/380,719 8 September 2010 (08.09.2010) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: AQUEOUS POLISHING COMPOSITION AND PROCESS FOR CHEMICALLY MECHANICALLY POLISHING SUBSTRATES CONTAINING SILICON OXIDE DIELECTRIC AND POLYSILICON FILMS

(57) Abstract: An aqueous polishing composition has been found, the said aqueous polishing composition comprising (A) at least one type of abrasive particles which are positively charged when dispersed in an aqueous medium free from component (B) and having a pH in the range of from 3 to 9 as evidenced by the electrophoretic mobility; (B) at least one water-soluble polymer selected from the group consisting of linear and branched alkylene oxide homopolymers and copolymers; and (C) at least one anionic phosphate dispersing agent; and a process for polishing substrate materials for electrical, mechanical and optical devices making use of the aqueous polishing composition.

